

**AMENDMENTS TO THE DRAWINGS**

The attached sheets of drawings correct reference characters and typographical errors in  
FIGs. 2-4.

Attachments: Three (3) Replacement Sheets (FIGs. 2-4)  
Three (3) Annotated Sheets (FIGs. 2-4)

**REMARKS/ARGUMENTS**

In this Amendment Under 37 C.F.R. § 1.111 (“Amendment”), Applicant amends the specification and claims 1-5, 7-14, 16-24, 26-28, 30-40, and 42-53 in order to improve clarity. No new matter is introduced.

Prior to entry of the Amendment, claims 1-53 were pending in the application. After entry of the Amendment, claims 1-53 remain pending in the application.

In the Office Action, the Examiner appears to have rejected claims 1-18, 30-38, and 53 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,668,267 B1 to Pomet (“Pomet”); rejected claims 19-21 and 24-29 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,438,569 B1 to Abbott (“Abbott”); and rejected claims 22 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Abbott in view of U.S. Patent No. 5,790,874 to Takano et al. (“Takano”).

Applicant respectfully traverses the Examiner’s rejections.

**Foreign Priority**

Applicant notes that although the Form PTOL-326 in the Office Action attempts to indicate the status of the claim for foreign priority, that status appears to be incomplete because none of boxes 1, 2, or 3 is checked.

Applicant requests that the Examiner indicate the complete status of the claim for foreign priority in the next paper mailed by the U.S. Patent and Trademark Office (“USPTO”).

**IDS**

Applicant filed an Information Disclosure Statement (“IDS”) on January 6, 2005. However, on page 2 of the Office Action, that date is listed as January 6, 2004. Applicant believes that page 2 of the Office Action is a typographical error and understands that statement

as meaning that the IDS filed on January 6, 2005, is in compliance with the provisions of 37 C.F.R. § 1.97 and was considered by the Examiner.

#### Drawings

The attached sheets of drawings correct reference characters and typographical errors in FIGs. 2-4.

Also, Applicant notes that the Form PTOL-326 in the Office Action does not indicate the status of the drawings filed on December 17, 2003.

Applicant requests that the Examiner indicate the status of the drawings filed on December 17, 2003—as well as those filed with this Amendment—in the next paper mailed by the USPTO.

#### Claim Rejections Under 35 U.S.C. § 102(e)—Pomet

Applicant submits that element 711 in FIG. 7 of Pomet is a standard adder, not a Booth recoder. Similarly, Applicant submits that element 712 in FIG. 7 of Pomet also is a standard adder, not a modulus recoder.

For at least these reasons, the Examiner has failed to establish a proper prima facie case of anticipation under 35 U.S.C. § 102(e) for independent claim 1, 5, 8, 11, 30, or 53. And, for at least these reasons, the Examiner has failed to establish a proper prima facie case of anticipation under 35 U.S.C. § 102(e) for dependent claim 2-4, 6, 7, 9, 10, 12-18, or 31-38, all of which depend directly or indirectly from claim 1, 5, 8, 11, 30, or 53.

#### Claim Rejections Under 35 U.S.C. § 102(e)—Abbott

Assuming, arguendo, that the sums of products datapath of FIG. 1A of Abbott discloses a Booth recoder, Applicant submits that the Booth recoder would include at least summation circuits 146, 148, and/or 150. Applicant notes that the multiplexer in FIG. 1B of Abbott is

disposed within partial product generator 144-0-0, which is itself disposed within the sums of products datapath of FIG. 1A. For at least this reason, Applicant submits that Abbott does not disclose that the multiplexer in FIG. 1B “inputs at least one output from the Booth recoder” (emphasis added), as recited in claim 19.

For at least this reason, the Examiner has failed to establish a proper prima facie case of anticipation under 35 U.S.C. § 102(e) for independent claim 19. And, for at least this reason, the Examiner has failed to establish a proper prima facie case of anticipation under 35 U.S.C. § 102(e) for any of dependent claims 20, 21, 24, and 25, all of which depend directly or indirectly from claim 19.

Additionally, Applicant submits that c. 5/l. 51 – c. 6/l. 18 of Abbott does not disclose a modulus recoder, as alleged by the Examiner. In fact, a word search of Abbott at the USPTO website (Patent Full-Text and Full-Page Image Databases) reveals that the word “modulus” does not even appear in Abbott.

For at least this reason, the Examiner has failed to establish a proper prima facie case of anticipation under 35 U.S.C. § 102(e) for independent claim 26. And, for at least this reason, the Examiner has failed to establish a proper prima facie case of anticipation under 35 U.S.C. § 102(e) for any of dependent claims 27-29, all of which depend directly or indirectly from claim 26.

Further, with respect to claims 25 and 29, Applicant submits that c. 7/l. 3-12 of Abbott discusses 4:1 multiplexers as opposed to 8:1 multiplexers.

Claim Rejections Under 35 U.S.C. § 103(a)—Abbott/Takano

Applicant submits that Takano does not overcome the deficiencies discussed above regarding Abbott. For at least this reason, Applicant submits that the Examiner has failed to

establish a proper prima facie case of obviousness under 35 U.S.C. § 103(a) for dependent claim 22 or 23.

Request for Reconsideration and Allowance

Accordingly, in view of the above amendments and remarks, reconsideration of the rejections and allowance of each of claims 1-53 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

If necessary, the Director of the USPTO is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; in particular, extension of time fees.

Respectfully submitted,

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By

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JAC/LFG/cm

Fig. 2

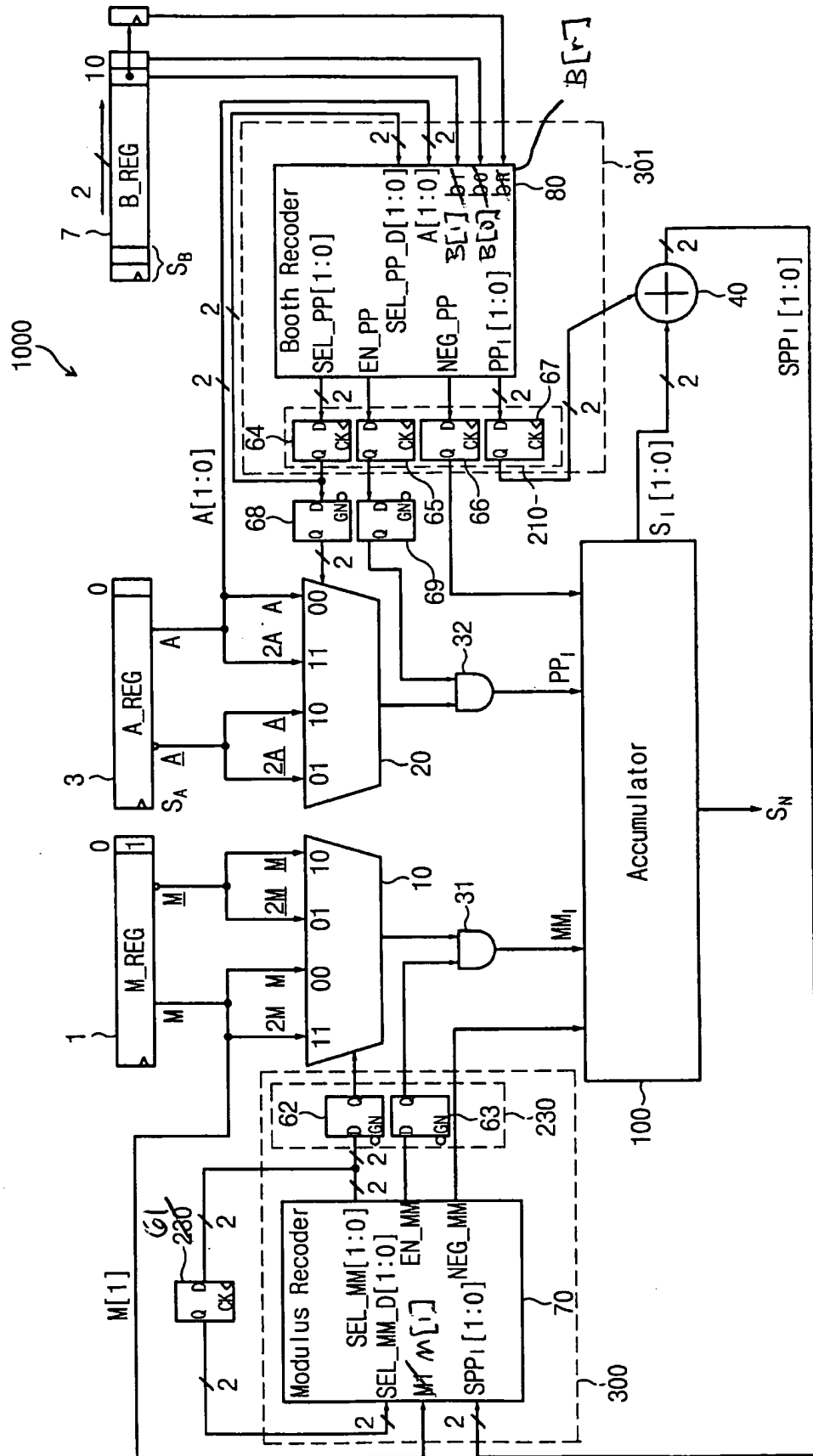


Fig. 3

1 70

Inputs of MR(220)			Selected MM <sub>i</sub>	Outputs of MR(70)			
M[1]	SPP <sub>i</sub> [0]	SPP <sub>i</sub> [1]		SEL_MM_D[1:0]	EN_MM	NEG_MM	
0	0	0	0	SEL_MM_D[1:0]	0	0	0
0	0	1	-M	10	1	1	1
0	1	0	2M	11	1	0	0
0	1	1	M	00	1	0	0
1	0	0	0	SEL_MM_D[1:0]	0	0	0
1	0	1	M	00	1	0	0
1	1	0	2M	11	1	0	0
1	1	1	-M	10	1	1	1

Fig. 4

Inputs of BR(80)			Selected PP <sub>i</sub>	Outputs of BR(80)			
b <sub>L</sub> [1]	b <sub>L</sub> [0]	b <sub>R</sub> [1]		SEL_PP_D[1:0]	EN_PP	NEG_PP	PP <sub>i</sub> [1], PP <sub>i</sub> [0]
0	0	0	0	SEL_PP_D[1:0]	0	0	0,0
0	0	1	A	00	1	0	A[1], A[0]
0	1	0	A	00	1	0	A[1], A[0]
0	1	1	2A	11	1	0	A[0], 0
1	0	0	-2A	01	1	1	A[0], 0
1	0	1	-A	10	1	1	A[1]^A[0], A[0]
1	1	0	-A	10	1	1	A[1]^A[0], A[0]
1	1	1	0	SEL_PP_D[1:0]	0	0	0,0